AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1.   (Previously Presented) A method for performing a parking assist control for automatically guiding a vehicle to a target parking position, comprising:

calculating a first change of a vehicle direction based on output of a speed sensor and a steering angle obtained by a steering angle sensor;

calculating a second change of the vehicle direction based on a yaw rate obtained by a yaw rate sensor;

comparing the first change of the vehicle direction and the second change of the vehicle direction; and

determining whether or not the parking assist control is required to be stopped based on a result of a comparison between the first and second calculated changes of the vehicle direction.

2.   (Previously Presented) A method for performing a parking assist control according to claim 1, wherein the calculation of the first change of the vehicle direction and the calculation of the second change of the vehicle direction are performed at the same time.

3.   (Previously Presented) A parking assist apparatus for performing a parking assist control for automatically guiding a vehicle to a target parking position, comprising:

a traveling distance calculating means for calculating a traveling distance of a vehicle during an implementation of the parking assist control;

a first calculating means for calculating a first change of a vehicle direction occurring within the traveling distance based on output of a speed sensor and output of a steering angle sensor;

a second calculating means for calculating a second change of the vehicle direction occurring within the traveling distance based on a yaw rate obtained by a raw rate sensor; and

a determining means for comparing calculated results obtained by the first calculating means and the second calculated means and determining that the parking assist control is to be stopped when a difference between the first change of the vehicle direction and the second change of the vehicle direction is greater than a predetermined value.

4.   (Original) A vehicle assist apparatus according to claim 3, wherein the determining means compares the calculated results of the first calculating means and the second calculated means which are calculated at the same time.

5.   (Previously Presented) A parking assist apparatus according to claim 3, wherein the second calculating means calculates a deflection angle θ y based on the yaw rate sensor.

6.   (Original) A parking assist apparatus according to claim 3, wherein the first calculating means calculates a deflection angle θ h based on the speed sensor and the steering angle sensor.

7.   (Currently Amended) A parking assist apparatus according to claim [[7]] 3, wherein

the second calculating means calculates a deflection angle θ y based on the yaw rate sensor.

8.   (Currently Amended) A parking assist apparatus according to claim [[8]] 3, wherein

the determining means determines that one of the yaw rate sensor and the steering angle sensor is fault when a difference between the deflection angles θ h and θ y is greater than the predetermined value.

9.   (Previously Presented) A parking assist apparatus for performing a parking assist control for guiding a vehicle to a target parking position, comprising:

a first calculating means for calculating a first change of a vehicle direction based on output of a speed sensor and output of a steering angle sensor;

a second calculating means for calculating a second change of the vehicle direction based on output obtained by a raw rate sensor; and

a determining means for comparing calculated results obtained by the first calculating means and the second calculated means and determining that the

parking assist control is to be stopped based on a result of a comparison between the calculated results when a difference between the first change of the vehicle direction and the second change of the vehicle direction is greater than a predetermined value.

10.   (Previously Presented) A parking assist apparatus according to claim 9, wherein the first calculating means calculates a deflection angle θ h based on the output of the speed sensor and the steering angle sensor.

11.   (Previously Presented) A parking assist apparatus according to claim 10, wherein the second calculating means calculates a deflection angle θ y based on the output of the yaw rate sensor.

12.   (Previously Presented) A parking assist apparatus according to claim 11, wherein the determining means determines that one of the yaw rate sensor and the steering angle sensor is fault when a difference between the deflection angles θ h and θ y is greater than the predetermined value.

13.   (Previously Presented) A method for performing a parking assist control according to claim 1, further comprising determining that the parking assist control is required to be stopped when a difference between the first change of the vehicle direction and the second change of the vehicle direction is greater than a predetermined value.